Meeting of the Central Valley Flood Protection Board August 26, 2010

Staff Report – Encroachment Permit

Steve Mello Sacramento County

<u>1.0 – ITEM</u>

Consider approval of Permit No. 18555 (Attachment B)

2.0 – APPLICANT

Steve Mello

3.0 - LOCATION

The project is located south of Walnut Grove at 15335 Tyler Island Road. (Georgiana Slough, Sacramento County, see Attachment A)

4.0 - DESCRIPTION

To authorize an existing 191-linear-foot earthen pad used to support the foundation for and provide access to an existing residential dwelling on the landside slope of the left bank levee of the Georgiana Slough at approximately Levee Mile 3.63, Unit 1.

5.0 - PROJECT ANALYSIS

The proposed project consists of an earthen pad approximately 115 feet by 160 feet and 15 feet high constructed on the landside of the east levee embankment of the Georgiana Slough. The fill was constructed to support an elevated foundation and provide access for a modular residence. The modular residential dwelling is supported on shallow spread stem footings. The residence lies outside of the Board's easement with a finish floor elevation of 18.5-Feet, which is 7.1-Feet above the 100-yr base flood elevation of 11.4-Feet (NGVD 29) (see Figure 1 on page 2).

In addition, Board staff conducted a site visit to verify the application submittal package. Following the site visit and review of the permit application, it was determined that the work was completed in accordance with California Code of Regulations and standard engineering practices.

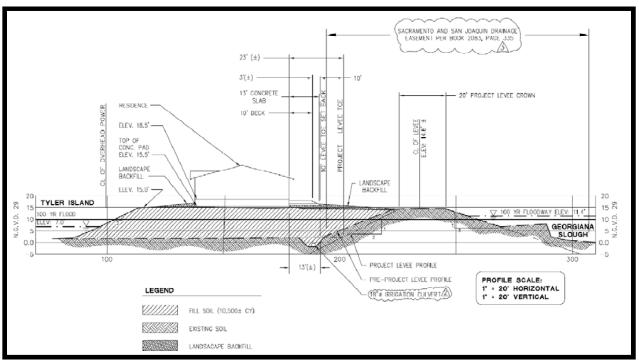


Figure 1-Cross Section of levee and fill (prepared by DCC Engineering Revised on 08.11.2010)

5.1 – Hydraulic Analysis

No hydraulic modeling was necessary for this project as the proposed work is on the landside of the federal flood control levee.

5.2 – Geotechnical Analysis

A Geotechnical Report prepared by Neil O. Anderson & Associates dated February 4, 2010 (Project No. LGE100005) analyzed the embankment for liquefaction, slope stability and settlement in accordance with US Army Corps Engineering Manual (EM 1110-2-1913). All three factors met the minimum design factor of safety and staff has determined that the work was completed in accordance with the California Code of Regulations and standard engineering practices.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- U. S. Army Corps of Engineers has reviewed the application and has no
 objections to the approval of this permit subject to the conditions stated on their
 review letter (Permit Exhibit A). After various coordination with the Corps and the
 applicant it has been determined that conditions a and f from the Corps' review
 letter are not applicable based on the revised plans dated August 11, 2010
 showing the irrigation pipe outside 10' from the landside levee toe and the
 Board's easement.
- Reclamation District 563 (RD 563) has endorsed this application without conditions.

7.0 - CEQA ANALYSIS

Board staff has prepared the following CEQA determination:

Reclamation District No. 563, as the lead agency under CEQA, approved the project (Mello Residence Berm) on September 9, 2009 and determined that the project was categorically exempt under a Class 4 Categorical Exemption (CEQA Guidelines Section 15304) covering minor alterations to land. The Board, acting as a responsible agency under CEQA, has reviewed the Reclamation District No. 563 determination and has independently determined that the project is exempt from CEQA under Class 4 (CEQA Guidelines Section 15304) covering minor alterations to land.

8.0 - SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

The earthen pad is constructed on the landside and designed in accordance with engineering regulations and should not have any effects on the State Plan of Flood Control.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

The proposed project provides sufficient freeboard above the 100-yr flood event. Effects of the earthen pad due to projected future events would be minimal.

9.0 - STAFF RECOMMENDATION

Staff recommends that the Board determine the project to be exempt from CEQA and to approve the permit.

10.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit

Exhibit A – U.S. Army Corps' Review Letter dated June 25, 2010

Report Completed by: Angeles Caliso Design Review: Angeles Caliso Environmental Review: Andrea Mauro

Document Review: Ali Porbaha, Len Marino

ATTACHMENT A

Location Maps and Photos

MELLO RESIDENCE BERM

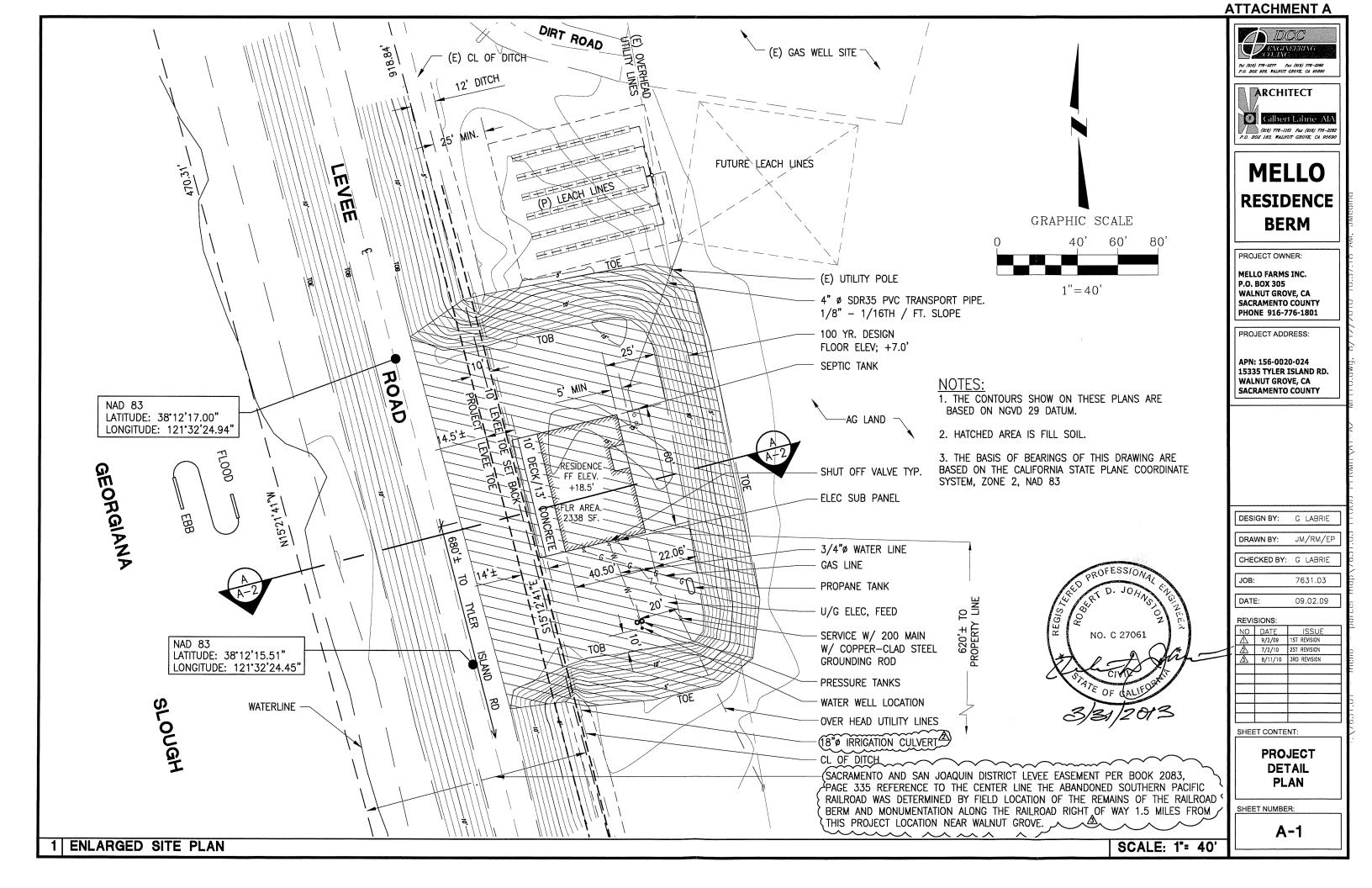
15335 Tyler Island Rd., Walnut Grove, CA 95690 APN: 156-0020-024

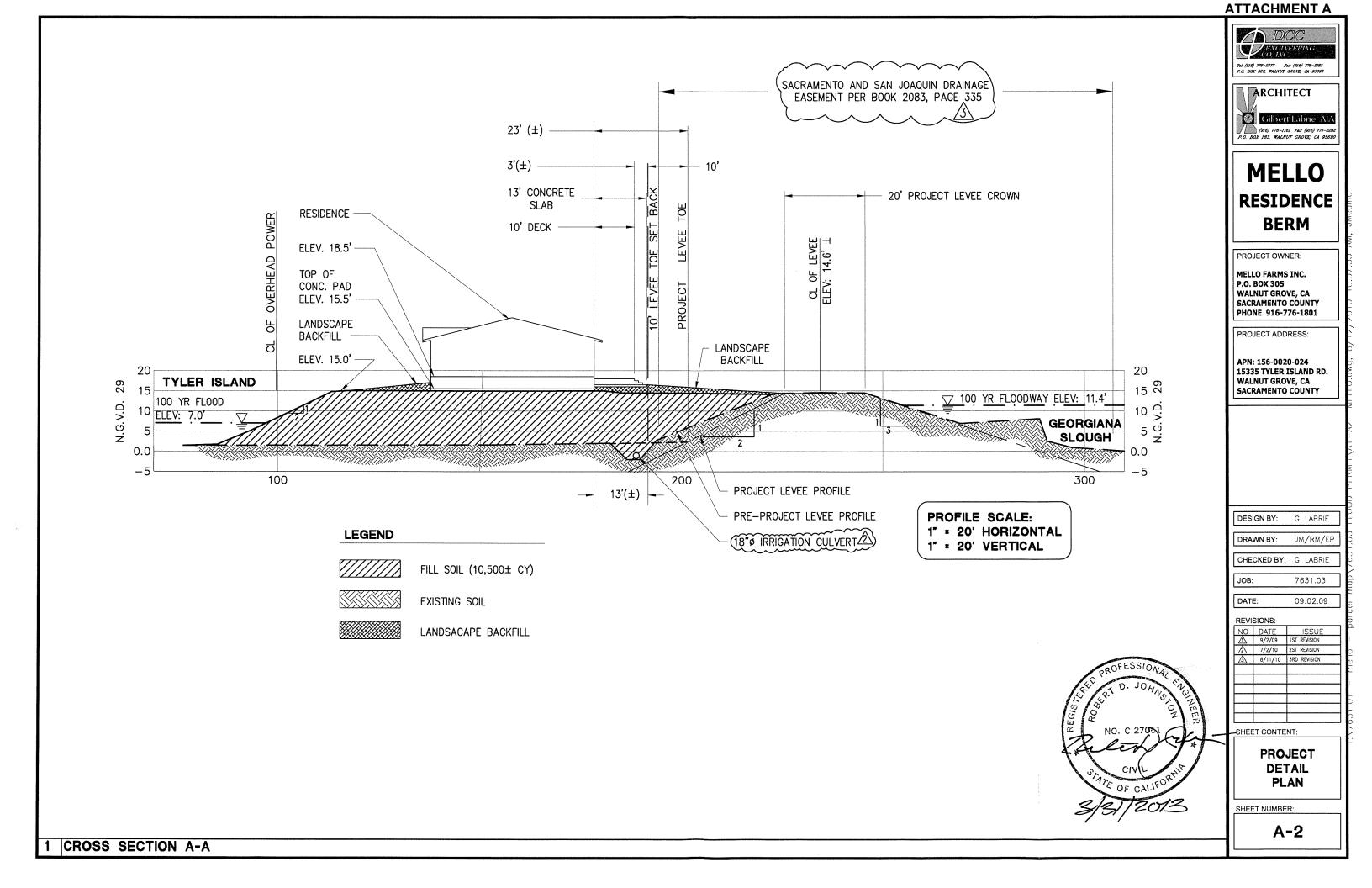


North view of berm



South view of berm





ATTACHMENT B

Draft Permit No. 18555
Exhibit A- U.S. Army Corps' Review Letter dated
June 25, 2010

DRAFT

STATE OF CALIFORNIA THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18555 BD

This Permit is issued to:

Steve Mello PO Box 305 Walnut Grove, California 95690

To authorize an existing 191-linear-foot earthen pad used to support the foundation for and provide access to an existing residential dwelling on the landside slope of the left (east) bank levee of the Georgiana Slough. The project is located south of Walnut Grove at 15335 Tyler Island Road (Section 15, T4N, R4E, MDB&M, Reclamation District 563, Georgiana Slough, Sacramento County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated:	
	Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18555 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and Reclamation District No. 563 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

FIFTEEN: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources, Reclamation District No. 563 or any other agency responsible for maintenance.

SIXTEEN: The permittee shall be responsible for repair of any damages to the project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

SEVENTEEN: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

EIGHTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims related to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its

defense, in its sole discretion.

NINETEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

TWENTY: Any additional encroachment(s) on the levee section or waterward berm, require an approved permit from the Central Valley Flood Protection Board and shall be in compliance with the Central Valley Flood Protection Board's regulations (Title 23 California Code of Regulations).

TWENTY-ONE: Any new structures, dwellings, or landscaping within the floodway, within the levee section, or within 10 feet of the landward levee toe will require a Central Valley Flood Protection Board permit. Any new structures, dwellings, or landscaping that are constructed without approval of The Reclamation Board shall be removed by the owner, at the owner's expense, upon the request of the authorized representative of RD563, the Department of Water Resources, the Central Valley Flood Protection Board, or any other agency responsible for levee maintenance.

TWENTY-TWO: Fill material shall be placed only within the area indicated on the approved plans.

TWENTY-THREE: All fill material shall be imported impervious material with 20 percent or more passing the No. 200 sieve, a plasticity index of 8 or more, and a liquid limit of less than 50 and free of lumps or stones exceeding 3 inches in greatest dimension, vegetative matter, or other unsatisfactory material. Fill material shall be compacted in 4- to 6-inch layers to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91.

TWENTY-FOUR: Septic tanks, leach lines, domestic wells, and appurtenant structures shall be located 65 feet or more from the centerline of the levee.

TWENTY-FIVE: Stockpiled material, temporary buildings, or equipment shall not remain in the floodway during the flood season from November 1 to April 15.

TWENTY-SIX: The finished floor elevation of the proposed structure shall be a minimum of 2 feet above 11.4 feet, NGV Datum.

TWENTY-SEVEN: Pipelines that are parallel to and within 10 feet of the landward levee toe shall be located a minimum distance of 10 feet beyond the levee toe and buried no deeper than 5 feet.

TWENTY-EIGHT: All irrigation and drainage ditches and swales shall be located and maintained at least 10 feet away from the landward levee toe or outside of the SSJDD easement, whichever is less, and be no deeper than 5 feet.

TWENTY-NINE: Ditches greater than 5 feet deep shall be relocated 20 feet from the landward levee toe or as required to ensure levee stability for the site-specific soil conditions.

THIRTY: In the event that seepage is identified, the permittee is responsible for installing a levee toe drain through the new building embankment in order to convey any seepage that may pass through the levee. The toe drain shall be perforated pipe, minimum 8-inches in diameter, and shall be driven using lateral boring equipment though the new embankment and not disturb the levee. The ends of the pipe shall be kept visible for inspection and monitoring.

THIRTY-ONE: The permittee shall comply with all conditions, except for conditions a and f, set forth in the letter from US Army Corps of Engineers dated June 25, 2010, which is attached to this permit as Exhibit A and is incorporated by reference.



DEPARTMENT OF THE ARMY U.S. Army Engineer District, Sacramento Corps of Engineers 1325 J Street Sacramento, California 95814-2922

Flood Protection and Navigation Section (18555)

JUN 2 5 2010

Mr. Jay Punia, Executive Officer Central Valley Flood Protection Board 3310 El Camino Avenue, Room 151 Sacramento, California 95821

Dear Mr. Punia:

We have reviewed a permit application by Steve Mello (application number 18555). This project includes placing 191 linear feet of fill on the landside slope of the left bank levee of Georgiana Slough. Work also includes an 18 inch drainage pipe at the landside toe of the levee. The project is located on Tyler Island at 38.2031°N 121.5395°W NAD83, in Sacramento County, California.

The District Engineer has no objection to approval of this application by your Board from a flood control standpoint, subject to the following conditions:

- a. That the existing 18 inch drainage pipe shall be relocated at least 10 feet landward of the existing landside levee toe.
- b. That maintenance access shall be established along the outer berm toe. This access shall remain free of obstructions for floodfighting and maintenance.
- c. That the fill shall be compacted to at least the same density as the project levee.
 - d. That drainage from the fill shall be directed away from the project levee.
- e. Any vegetation planting on the berm, within the project right-of-way shall conform to ETL 1110-2-571.
- f. That the applicant shall verify the condition of the drainage pipe under the fill using video taping or visual inspection methods every five years and submit results of the inspection to the U.S. Army Corps of Engineers, Sacramento District, Flood Protection and Navigation Section though the Central Valley Flood Protection Board.

Based upon the information provided, a Section 10 or Section 404 permit is not required.

A copy of this letter is being furnished to the acting chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821.

Sincerely,

Consider D. Consider Michael D. Mahoney, P.E.

Chief, Construction-Operations Division